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Extreme Heat Can Cause Extreme, But Preventable, Illness

By Melanie Reynolds
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Montana may have a reputation for its bitter cold, but that doesn't mean we're immune to the health risks of extreme heat. Our most recent heat wave is a testament to that!

Just as we all take steps in the winter to prevent hypothermia, we should be aware in the summer of the dangers of *hyperthermia*. That's when your body temperature soars because your body can't compensate for heat in the environment. Heatstroke, heat exhaustion, and heat cramps are all types of hyperthermia.

Your risk for these conditions can increase depending on the outside temperature, the humidity, your general health, and your individual lifestyle. Older people, young children, and those who are sick or overweight are especially vulnerable.

Who's at Risk

Most heat illnesses occur from staying out in the heat too long or from exerting yourself too much for your age or physical condition.

Other factors that can increase your risk for hyperthermia are:

- Lack of air conditioning (well-positioned fans can help)
- Overdressing
- Not drinking enough water
- Alcohol use
- Age-related changes to your skin, such as poor circulation or sweat glands that don't work well
- Heart, lung, and kidney diseases, or any illness that causes general weakness or fever
- High blood pressure
- Use of several medications (though you should never stop taking a prescription drug without the blessing of your doctor)

Preventing Heat Illness

To prevent hyperthermia, stay indoors in air conditioning when outside temperatures climb. If you don't have air conditioning, consider going to a cool public place, like a movie theater, library, restaurant, or store. Other ways to prevent heat-related illnesses include:

- Drink plenty of fluids (but avoid alcohol and caffeine), even if you don't feel thirsty.
- Take cool showers or baths to cool down.
- When outdoors, wear sunscreen, a hat, and loose, lightweight, light-colored clothing.
- Pace yourself. Postpone strenuous outdoor activities if possible.
- Schedule outdoor activities in the early morning or evening.

Stages of Hyperthermia

Heat cramps are the earliest sign of heat illness. They're strong and usually occur in the abdomen and legs. You can relieve the cramps by massaging the muscles gently but firmly. Then take care to cool down so your symptoms don't get worse.

If you don't make an effort to cool off and drink more fluids at this point, you could move into a more severe stage of heat illness. The progression to heat exhaustion and then heatstroke can be very quick and can lead to a life-threatening situation.

Symptoms of heat exhaustion include pale skin, heavy sweating, nausea, dizziness, dilated pupils, fainting, and weakness. Heat exhaustion can lead to heatstroke if it isn't treated. Children with heat exhaustion should get medical attention.

Heatstroke is the most serious type of hyperthermia. It can be life-threatening. From 1999 to 2009, it caused more than 7,000 deaths across the nation, according to the Centers for Disease Control and Prevention.

Heatstroke occurs when your body temperature rises over 104 degrees. Symptoms include rapid pulse, no sweating, dry flushed skin, faintness or coma, and irrational behavior. Anyone with these symptoms should seek emergency medical care immediately.

How to Treat Hyperthermia

If you or someone you know is suffering from a heat-related illness, the National Institutes of Health offers these tips:

- Get out of the heat and into a shady, cool place. Lie down and loosen tight clothing.
- If you suspect heatstroke, call 911.
- Place a cold, wet washcloth over wrists, neck, armpits, and groin to help cool the blood.
- Bathe or sponge the body with cold water.
- Drink plenty of fluids, but avoid alcohol and caffeine.

If you have elderly relatives, friends, or neighbors, a heat wave is a good time to check on their well-being. And NEVER leave a child (or pet) alone in your car in the heat, even for short periods of time.

and even with the windows down and air conditioning on. A child's body temperature heats up three to five times faster than an adult's. When it reaches 107 degrees, the child dies.

A Word About Kids, Cars

Heatstroke from hot cars is the leading cause of non-crash related deaths among children 14 and younger, according to the National Highway Traffic Safety Administration (NHTSA). It can occur in outdoor temperatures as low as 57 degrees.

In 10 minutes a car can heat up 20 degrees, the NHTSA reported. Rolling down a window does little to help keep the car cool.

If you see a child alone in a hot car, call 911 immediately.

More Information

To learn more about recognizing and treating heat illness, visit <http://www.nlm.nih.gov/medlineplus/heatillness.html>

To learn more about the dangerous combination of kids and hot cars, visit <http://www.safercar.gov/parents/InandAroundtheCar/heatstroke.htm>

To learn more about coping with extreme heat, visit <http://emergency.cdc.gov/disasters/extremeheat/>